

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-6. (Cancelled)

7. (Currently Amended) ~~The catheter of claim 1,~~ A balloon catheter comprising:
an elongate shaft having a distal region and a proximal region and defining a lumen
therebetween; and
an inflatable balloon disposed over a portion of the distal region of the elongate shaft, the
balloon having distal and proximal portions and distal and proximal ends;
wherein the balloon is configured to expand to a first expansion configuration when a
first amount of fluid is inserted into the balloon, and to expand to a second expansion
configuration when a second, greater, amount of fluid is inserted into the balloon; wherein when
the balloon is in the first expansion configuration, the distal portion of the balloon is expanded
and the proximal portion of the balloon is in a collapsed configuration;
wherein the proximal portion of the balloon is releasably attached to the shaft;
wherein the proximal portion of the balloon and shaft are heated to releasably attach the
proximal portion to the shaft.

8-31. (Cancelled)

32. (Currently Amended) ~~The catheter assembly of claim 28,~~ A catheter assembly
comprising:
an elongate shaft having a distal region and a proximal region and a lumen disposed
therebetween;
an expandable balloon disposed about the distal region of the shaft;
wherein the balloon is configured such that as an inflation fluid is inserted into the
balloon, the balloon is expanded from a completely collapsed configuration to a partially inflated
configuration and then to a fully inflated configuration; wherein a diameter of the balloon in the

partially inflated configuration is substantially the same as a diameter of the balloon in the fully inflated configuration;

wherein in the partially inflated configuration a first portion of the balloon is inflated while a second portion of the balloon remains uninflated, and in the fully inflated configuration, both the first and second portions of the balloon are inflated;

wherein the balloon has first and second ends bonded to the shaft; wherein the second portion of the balloon is releasably attached to the shaft;

wherein the second portion of the balloon and the shaft are heated to releasably attach the second portion to the shaft.

33. (Currently Amended) ~~The catheter assembly of claim 28,~~ A catheter assembly comprising:

an elongate shaft having a distal region and a proximal region and a lumen disposed therebetween;

an expandable balloon disposed about the distal region of the shaft;

wherein the balloon is configured such that as an inflation fluid is inserted into the balloon, the balloon is expanded from a completely collapsed configuration to a partially inflated configuration and then to a fully inflated configuration; wherein a diameter of the balloon in the partially inflated configuration is substantially the same as a diameter of the balloon in the fully inflated configuration;

wherein in the partially inflated configuration a first portion of the balloon is inflated while a second portion of the balloon remains uninflated, and in the fully inflated configuration, both the first and second portions of the balloon are inflated;

wherein the balloon has first and second ends bonded to the shaft; wherein the second portion of the balloon is releasably attached to the shaft;

wherein the second portion of the balloon is releasably attached to the shaft with a releasable adhesive.

34-37. (Cancelled)

38. (Currently Amended) ~~The catheter of claim 37,~~ A balloon catheter comprising:

an elongate shaft having a distal region and a proximal region and defining a lumen therebetween; and

an inflatable balloon disposed over a portion of the distal region of the elongate shaft, the balloon having a first longitudinal portion and a second longitudinal portion and distal and proximal ends;

wherein the balloon is configured for the first longitudinal portion to expand to a first expansion configuration when a first amount of fluid is inserted into the balloon, and for the second longitudinal portion to expand when a second, greater, amount of fluid is inserted into the balloon;

wherein the second longitudinal portion of the balloon is releasably attached to the shaft;

wherein the second longitudinal portion of the balloon and shaft are heated to releasably attach the proximal portion to the shaft.

39. (Currently Amended) ~~The catheter of claim 37,~~ A balloon catheter comprising:

an elongate shaft having a distal region and a proximal region and defining a lumen therebetween; and

an inflatable balloon disposed over a portion of the distal region of the elongate shaft, the balloon having a first longitudinal portion and a second longitudinal portion and distal and proximal ends;

wherein the balloon is configured for the first longitudinal portion to expand to a first expansion configuration when a first amount of fluid is inserted into the balloon, and for the second longitudinal portion to expand when a second, greater, amount of fluid is inserted into the balloon;

wherein the second longitudinal portion of the balloon is releasably attached to the shaft;

wherein the second longitudinal portion of the balloon is releasably attached to the shaft with a releasable adhesive.

40-44. (Cancelled)